NPDES/PCB
Inspection Report

Seattle Iron & Metals Corp.
601 S. Myrtle St.
Seattle, WA 98108

Prepared by:

Jon Klemesrud
Environmental Protection Agency, Region 10
Office of Compliance and Enforcement
Inspection and Enforcement Management Unit

Table of Contents

[Unless otherwise noted, all details in this inspection report were obtained from conversations with Ed Armstrong, Eric Paul, or Raymond Perez, or from observations made during the inspection.]

I. Facility Information

Facility Name:	Seattle Iron & Metals Corp.
Facility Contact(s):	Eric Paul- Assistant Vice President Operations Phone: (206) 682-0040 Raymond Perez- Water Treatment/Maintenance Phone: (206) 682-0040 Ed Armstrong- Ferrous/Maintenance Manager Phone: (206) 682-0040
SIC Code Facility Type:	(5093)-Scrap Metal Yard
Facility Location:	601 S. Myrtle St. Seattle, WA 98108
GPS:	N 47.53924/W 122.32771
Mailing Address:	601 S. Myrtle St. Seattle, WA 98108

II. Inspection Information

Inspection Dates:	April 29, 2010 & May 11, 2010
Inspectors:	Jon Klemesrud, Inspector EPA Region 10, OCE / IEMU (206) 553-5068 Dave Terpening, Inspector EPA Region 10, OCE / IEMU (206) 553-6905 (April 29th Only) Robert Wright, Water Quality Specialist Washington Department of Ecology (206) 909-6640

Inspectors (cont): (May 11th Only)
Jed Januch, Investigator
EPA Region 10, OEA
(360) 871-8731

(May 11th Only)
Beth Schmoyer, Engineer
Seattle Public Utilities
(206) 384-1199

Arrival Time:	April 29, 2010: 09:30AM	May 11, 2010: 09:30AM
Departure Time:	April 29, 2010: 11:30AM	May 11, 2010: 10:30PM

Weather Condition: Partly Cloudy

Purpose: The inspection was conducted to document the facility's compliance with their NPDES Individual Permit No. WA0031968 as well as to determine its compliance with the PCB regulations, 40 CFR Part 761, as published in the Federal Register of May 31, 1979, and as amended.

This inspection also included sediment sampling from catch basins in and around the facility. Theses sediments samples were analyzed for metals and PCBs. This sediment sampling was requested by the Superfund Program.

III. Facility Description

Seattle Iron & Metals is a scrap metal yard facility that collects ferrous and non-ferrous metals for recycling. After collection, metals are sorted by grade and size, shredded, and sold to other companies for recycling. There is no significant processing of the metals at this facility other than size reduction.

The industrial activity at the plant is exposed to stormwater and the discharge location is the Duwamish River. (See Attachment D, Facility Map) The facility is currently operating under NPDES Individual Permit # WA0031968.

IV. Owner and Operator Information

Seattle Iron & Metals Corp. is owned by the Sidell family, and operated by Eric Paul, Assistant Vice President of Operations.

V. Compliance History

On August 13, 2008 the State of Washington Department of Ecology issued Seattle Iron & Metals Corp (SIM) a Notice of Violation for stormwater effluent violations (TPH, zinc, lead, copper and turbidity) for exceedances occurring between December 2007 and June 2008. Also included in the Notice of Violation was an unauthorized discharge of turbid wastewater of about 22,000 gallons on July 21, 2008.

On November 14, 2008 the State of Washington Department of Ecology issued SIM an Administrative Order requiring SIM to submit engineering reports, studies, and schedules to provide for compliance with the permit. The Administrative Order is attached in this document as Attachment A.

See Attachment B, Effluent Violations, for a complete list of effluent limitation exceedances from Outfall #001 while under the current permit. The attached data was gathered from SIM discharge monitoring report (DMR) submittals.

VI. Scope of Inspection

This inspection consisted of an opening conference to conduct initial introductions and to discuss the purpose and expectations of the inspection, a facility tour, file review, and a closing conference to discuss compliance related concerns. The on and off-site sampling effort to support the Superfund program took place following the closing conference.

VII. Inspection Entry

Dave Terpening and I first arrived at the site on April 29th, 2010 and met with Bob Wright of Washington State Department of Ecology outside of the SIM facility. The purpose of this visit was to conduct a reconnaissance inspection outside the facility to identify nearby storm drains where we could collect the samples requested by the EPA Superfund Program.

Shortly after arriving outside the facility we were greeted by Eric Paul, Assistant Vice President of Operations. Upon meeting Mr. Paul, we explained the purpose of our visit. Dave and I presented our credentials to Mr. Paul and then continued with our reconnaissance inspection of the storm drains outside the facility.

On May 11, 2010, Dave Terpening and I returned to the SIM facility at 9:30am to conduct a routine compliance inspection of the facility. This was an unannounced inspection. We were joined on this inspection by Jed Januch (EPA) and by Beth Schmoyer of Seattle Public Utilities.

Upon arriving at the facility we met with Raymond Perez, Water Treatment/Maintenance Operator and Ed Armstrong, Ferrous/Maintenance Manager. Eric Paul who would usually deal with the compliance related activities was on vacation at the time of inspection.

Upon arriving at the facility, Dave, Jed, and I identified ourselves as EPA inspectors, presented our credentials and provided business cards to Mr. Perez and Mr. Armstrong. I informed them that the purpose of this visit was to conduct an inspection to determine compliance with the facility's NPDES Industrial Stormwater Permit, and to determine compliance with the Federal PCB regulations. We then presented Mr. Perez with a TSCA Notice of Inspection form and asked Mr. Perez to read and sign it before we start the inspection. The signed form is attached to this inspection report as Attachment C.

VIII. Inspection Findings

After the opening conference we proceeded to conduct a facility tour. Mr. Perez and Mr. Armstrong walked us through the metal yard identifying the drains on the facility and the stormwater treatment system.

A. Description of Stormwater Treatment Process

The design of the stormwater system at the facility is such that stormwater runoff is routed into multiple catch basins on site, all lined with filter socks and a metal catch basket. All stormwater catch basins except the administrative parking lot catch basin are are routed to a 48,000 gallon underground detention pipe prior to treatment.

The stormwater treatment system includes 3 chemical reaction tanks, a dissolved air flotation (DAF) unit, and four multi-media pressure filtration units (tertiary polishing filters or TPF's).

Collected stormwater first passes through the chemical reaction tanks (See Attachment G, Photo #4) in which chemicals are added to facilitate metal precipitation, coagulation and flocculation.

Water from the chemical reaction tanks pass through to the DAF unit, designed to remove suspended solids, oils and grease by air flocculation.

Sludge from the DAF unit is pumped to a 5,000gal conical bottom settling tank. This sludge is hauled away and disposed as needed by PRS Group, Inc. out of Tacoma, WA. According to Mr. Perez sludge was last hauled away about a year ago.

The treated water from the DAF unit enters the multi-media filters (TPF's). The filters are designed to remove filterable suspended solids.

At the end of the stormwater treatment system is a sampling port used by SIM staff to collect effluent samples before being discharged through Outfall #001 to the Duwamish River.

B. Non-Treated Stormwater Discharges

SIM has two sources of stormwater that are not captured and treated in their treatment system. One source is an administrative parking lot located at the east end of the property. There is no industrial activity performed in this parking lot.

Stormwater from this parking lot is routed through a catch basin and goes through an oil/water separator before being discharged to the city's stormwater line on S Myrtle St.

The second source of stormwater not captured and treated is the roof runoff from each of the buildings. The runoff from theses roofs are routed directly to the city's stormwater line on S Myrtle St.

C. Planned Expansion/Construction

Mr. Perez stated that the facility is in the design stages of an expansion project that would include expanding their operations on the east side of the facility to the property at 701 S Orchard St. This would allow SIM to haul auto fluff material from the main yard area to the existing building at 701 S Orchard St for further processing. According to Beth Schmoyer the City of Seattle is currently reviewing the permit applications for modifications to the existing building and drainage system.

SIM also has plans to install a pretreatment system during the last week of June 2010. This pretreatment system will be incorporated with the existing treatment system to treat all stormwater from the facility. The pretreatment system would consist of a vortex grit separator and an oil and water separator. The system would connect to the underground detention pipe where all stormwater is first routed. Ideally the addition of the pretreatment would allow for the current DAF treatment system to be more effective by having the stormwater treated before entering the DAF system.

D. Sediment and Track-Out Handling

Track-out issues at SIM are addressed by sweeping the exit/entrance each morning using a street sweeping vehicle. Mr. Perez stated an employee sweeps each morning instead of at the end of the day because the employee has an earlier shift and leaves a few hours before processes stop at the facility.

The facility has looked into the construction of a vehicle wheel wash at the entrance of the facility on S Myrtle St. to minimize track out. However, according to Eric Paul the entrance is too small to construct a wheel wash area. SIM is now looking into other BMPs to minimize track out. See Attachment G, Photo #1, to see the condition of the entrance/exit at the time of inspection.

To minimize sediment and other particulate matter from entering the treatment system SIM utilizes a Bobcat vehicle with a sweeping attachment to sweep inside the facility, employees also manually sweep with brooms as needed.

Sediment socks from each catch basin are replaced quarterly if not more frequently. Mr. Perez keeps a log of every catch basin on site and notes when each filter sock is replaced or is scheduled to be replaced. This log also includes records of when each catch basin is pumped and cleaned. Sediments from the filter fabric are sent for disposal to PRS Group, Inc. out of Tacoma, WA as needed.

E. Sampling and Analysis

Sampling is conducted by Mr. Perez and samples are taken to Freemont Analytical for the monthly analysis as required in the permit.

F. PCB Activity

Mr. Perez stated that the facility does not accept PCB equipment; all items unloaded at the facility are supervised when sorted. SIM has never had a stormwater discharge that exceeded the maximum daily PCB effluent limitation of 10ug/l as defined in their permit.

IX. Superfund Sampling Request

Metals and PCB sampling was requested by the EPA Region 10 Superfund Program to gather sediment data for on and off-site catch basins at the facility for source tracing in order to develop a strategy to protect the sediments and outfalls in the vicinity of SIM

Four sediment samples were collected for this project. Sample 10194000 was collected from a roof drain on the main office building; sample 10194001 was collected from a rain gutter on the north facing side of the maintenance building, sample 10194002 was collected from a catch basin in the employee parking lot, and sample 10194003 was collected from a catch basin on the south side S Myrtle St. Split samples were given to Beth Schmoyer for Seattle Public Utilities own analysis.

Screening level analysis for metals by x-ray fluorescence (XRF) spectroscopy was performed on the samples on May 11th, 2010. Results of this screening analysis can be found in Attachment F, XRF screening level analysis.

As of the completion date of this report, additional sample analysis for metals and analysis for PCBs were not yet completed by U.S. EPA Manchester Environmental Laboratory. Once these results become available they will be appended in the report.

X. NPDES Areas of Concern

We inspected the facility including the storm drains, metal yard, sorting line, the facility's SWPPP and monitoring records. Observations during the inspection included the identification of two areas of concern. These areas of concern are described as follows.

Sampling and Analytical Procedures

A. Section S2.B of the permit states that samples and measurements taken to meet the requirements of this permit must be representative of the volume and nature of the monitored parameters.

According to Mr. Paul pH is routinely analyzed at Freemont Analytical without taking into consideration the 15min holding time as defined in 40 CFR Part 136.3 *Table II-Required containers, preservation techniques, and holding times.* Mr. Paul stated that he was not aware of the holding time and that the lab had not mentioned it.

Stormwater Effluent Limits Exceedances

B. Section S1.B of the permit states that beginning on the effective date of this permit and lasting through the expiration date, the Permittee is authorized to discharge stormwater discharges at the permitted location subject to complying with the following limitations:

EFFLUENT LIMITATIONS: OUTFALL # 001	
Parameter	**Maximum Daily** [a]
Total Recoverable Copper	5.8 µg/L
Total Recoverable Lead	220.8 µg/L
Total Recoverable Zinc	95.1 µg/L
Total PCBs	10 µg/L
Total Petroleum Hydrocarbons (TPH)	5 mg/L
Turbidity	5 NTU [b]
pH	Within the range of 6.5 to 8.5 s.u.
[a] The Maximum Daily effluent limitation is defined as the highest allowable concentration of permitted parameters in the discharge per monitoring requirements.	
[b] The maximum daily is the maximum of daily averages.	

See Attachment B, Effluent Violations, for a complete list of effluent limitation exceedances from Outfall #001 while under the current permit. The attached data was gathered from SIM discharge monitoring report (DMR) submittals.

According to Mr. Perez the addition of the pretreatment system this summer will allow the current treatment system to operate more efficiently and get SIM back into compliance.

XII. PCB Areas of Concern

I did not see any PCB areas of concern at the time of inspection.

XII. Closing Conference

A closing conference was held with Mr. Perez at the time of inspection and over the phone with Mr. Paul to discuss our inspection observations.

I addressed the pH holding time concern with Mr. Paul and suggested he check with Freemont Analytical regarding this issue and review the approved EPA Methods defined in the facility's NPDES permit (page 7 of 31) for sampling events.

Report Completion Date: 06/17/10

Lead Inspector Signature:

ATTACHMENT A

Administrative Order

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
Northwest Regional Office • 3190 160th Avenue SE • Bellevue, Washington 98008-5452 • (425) 649-7000

November 14, 2008

REGISTERED MAIL
RB 336 145 623 US

Mr. Eric Paul
Seattle Iron and Metals Corporation
601 S. Myrtle Street
Seattle, WA 98108

Dear Mr. Paul:

Enclosed is Follow-up Order No. 6185 requiring Seattle Iron and Metals Corporation (SIM) to take corrective actions to prevent further violations of the State Waste Discharge Permit No. WA-003196-8 from occurring. The details of these actions are listed in the Order. The Order requires an engineering report and compliance schedule to ensure compliance with the permit. All correspondence relating to this document should be directed to Enforcement Coordinator at Department of Ecology, Northwest Regional Office, 3190 – 160th Avenue SE, Bellevue, WA 98008-5452. If you have any questions concerning the content of the document, please call Ed Abbasi at (425) 649-7227.

Sincerely,

Kevin C. Fitzpatrick
Water Quality Section Manager

KCF:EA:ct
Enclosure
cc: Larry Altose, Ecology PIO
Raman Iyer, Ecology
Jerry Shervey, Ecology
Ed Abbasi, Ecology
Cyma Tupas, Ecology
Central Files: Seattle Iron and Metals Corporation; Permit No. WA-003196-8; WQ 6.4

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

IN THE MATTER OF AN ADMINISTRATIVE ORDER AGAINST: Seattle Iron and Metals Corporation	))))	FOLLOW-UP ORDER No. 6185

To: Mr. Eric Paul
Seattle Iron and Metals Corporation
601 S. Myrtle Street
Seattle, WA 98108

This is an Administrative Order requiring Seattle Iron and Metals Corporation (SIM) to comply with Chapter 90.48 of Revised Code of Washington and the rules and regulations of the Department of Ecology as set forth in the State Waste Discharge Permit No. WA-003196-8, by taking certain actions which are described herein. The Order requires SIM to submit engineering reports, studies, and schedules to provide for compliance with the permit. RCW 90.48.120 (2) authorizes the Department of Ecology (Department) to issue Administrative Orders to accomplish the purposes of this Chapter RCW 90.48.

The Department's determination that a violation has occurred is based on the following facts:

On August 13, 2008, the Department issued a Notice of Violation (NOV) No: 5858 to Seattle Iron and Metals Corporation for:

Violations:

A. Stormwater Effluent Violations (TPH, zinc, lead, copper, and turbidity). December 2007 through June 2008.

According to the submitted Discharge Monitoring Reports (DMRs) covering a period between December 1, 2007, and June 30, 2008, SIM violated TPH, zinc, lead, copper, and turbidity discharge limitations for Outfall 001 of NPDES Waste Discharge Permit No. WA-003196-8. *These exceedances are violations of Condition S1.B of the permit as covered under RCW 90.48.* The specific violations for Outfall 001 were as follows:

Date	Parameter	Qualifier	DMR Value	Unit	Type	Min. Value	Max. Value
1-Dec-07	PETROLEUM HYDROCARBONS, TOTAL RECOVERABLE		17.1	MG/L	MAX		5
1-Jan-08	PETROLEUM HYDROCARBONS, TOTAL RECOVERABLE		33	MG/L	MAX		5
1-Feb-08	PETROLEUM HYDROCARBONS, TOTAL RECOVERABLE		33	MG/L	MAX		5
1-Mar-08	PETROLEUM HYDROCARBONS, TOTAL RECOVERABLE		45	MG/L	MAX		5
1-Apr-08	PETROLEUM HYDROCARBONS, TOTAL RECOVERABLE		13.2	MG/L	MAX		5
1-Jun-08	PETROLEUM HYDROCARBONS, TOTAL RECOVERABLE		11.1	MG/L	MAX		5
1-Dec-07	ZINC, TOTAL RECOVERABLE		1440	UG/L	MAX		95.1
1-Jan-08	ZINC, TOTAL RECOVERABLE		967	UG/L	MAX		95.1
1-Feb-08	ZINC, TOTAL RECOVERABLE		725	UG/L	MAX		95.1
1-Mar-08	ZINC, TOTAL RECOVERABLE		544	UG/L	MAX		95.1
1-Jun-08	ZINC, TOTAL RECOVERABLE		225	UG/L	MAX		95.1
1-Dec-07	LEAD, TOTAL RECOVERABLE		260	UG/L	MAX		220.8
1-Dec-07	COPPER, TOTAL RECOVERABLE		102	UG/L	MAX		5.8
1-Jan-08	COPPER, TOTAL RECOVERABLE		55	UG/L	MAX		5.8
1-Feb-08	COPPER, TOTAL RECOVERABLE		25	UG/L	MAX		5.8
1-Mar-08	COPPER, TOTAL RECOVERABLE		34	UG/L	MAX		5.8
1-Jun-08	COPPER, TOTAL RECOVERABLE		15	UG/L	MAX		5.8
1-Dec-07	TURBIDITY		48	NTU	AVG		5
1-Jan-08	TURBIDITY		72	NTU	AVG		5
1-Feb-08	TURBIDITY		54	NTU	AVG		5
1-Mar-08	TURBIDITY		63	NTU	AVG		5
1-Apr-08	TURBIDITY		6.9	NTU	AVG		5
1-Jun-08	TURBIDITY		18	NTU	AVG		5

Note: May 2008 for Outfall 001 – No qualifying storm event – No Discharge

B. Unauthorized discharge of turbid wastewater to the Duwamish River on July 21, 2008.

In addition, this facility processed and discharged about 22,000 gallons of wastewater to the Duwamish River on July 21, 2008. The discharge caused white plume in the Duwamish River. The nature of discharge is unknown since the event was not sampled, and it was not reported to the Department by the Permittee. A citizen photographed the event and notified the Department. Although the outfall is shared with the City of Seattle, the weather was clear and no rain was recorded and the facility has admitted to having discharge on that day. According to the facility, the discharge appeared clear at their treatment plant contrary to the photographs of the receiving water taken by the citizen group and submitted to the Department on July 21, 2008. Ecology's inspector visited the facility on August 13, 2008, to observe the treatment and the discharge. Apparently the discharge from the treatment system did appear clear on this day, but it became whitish foam at the time of contact with the receiving water during low tide, as observed and photographed by the citizen.

This incident is a violation of Condition S3.E.1.a, which states that.... *"Any noncompliance that may endanger health or the environment must be reported to the Department immediately within 24 hours from the time the Permittee becomes aware of this circumstance."*

Turbid wastewater was discharged to state waters on July 21, 2008, in violation of RCW 90.48.080. RCW 90.48.080 states that.....*it shall be unlawful for any person to throw, drain, run, or otherwise discharge into any of the waters of this state, or to cause, permit or suffer to be thrown, run, drained, allowed to seep or otherwise discharged into such waters any organic or inorganic matter that shall cause or tend to cause pollution of such waters according to the determination of the department.*

On August 19, 2008, SIM submitted a response letter for the above-referenced NOV. The response letter addressed the company's acknowledgement of the effluent violations and unauthorized discharge cited in the NOV, and the steps that have been taken and which are proposed to be taken by the company, to correct the violations. However, the response letter failed to provide a specific time-line for each proposed action to be taken by the company.

Corrective Actions: For these reasons, and in accordance with RCW 90.48, it is ordered that Seattle Iron and Metals Corporation prepare and submit engineering and construction documentation schedules to ensure compliance with the permit for the facility located at 601 S. Myrtle Street, Seattle, WA 98108. All engineering reports and plans submitted to the Department must comply with Chapter 173-240 WAC.

A. SIM must evaluate the adequacy and appropriateness of the existing Dissolved Air Floatation (DAF) and Filtration treatment unit and submit an engineering report to the Department for review and approval according to the compliance schedule shown below.

   The report shall identify shortcomings of the DAF for an appropriate design storm and must recommend remedies to eradicate the identified shortcoming. The possible remedies are, but not limited to, introduction and addition of new treatment units, expansion of the existing treatment unit and the existing detention vault, addition of pretreatment units, and extensive source control and pollution prevention at the site. Due to the nature of the runoff on this site and potential for creation of anaerobic condition inside the vault and rise in toxicity, the engineering report shall identify ways and means that would enable SIM to maximize treatment and collection of stormwater after each storm.

B. SIM must evaluate through a comprehensive engineering study, the drainage, topology, and hydrology of their existing site to identify quantity of potential contaminated stormwater runoffs and their potential entrance to the receiving water and submit an engineering report to the Department for review and approval according to the compliance schedule shown below.

   The evaluation shall examine the entire site, including shipping dock for cracks and leaks. It must also evaluate roads adjacent to SIM immediately leaving the SIM facility for pollutants that are tracked out by vehicles, and for pollution and contamination caused by SIM operations. The hydrologic study must be conducted using continuous hydrologic model, such as Western Washington Hydrologic Model, or a similar model approved by the Department.

C. Compliance Schedule

• **Pretreatment Engineering Report** The report shall identify pretreatment unit for the SIM facility with respect to 10-year, 24-hour storm design and use of Western Washington Hydrologic Model, or similar model approved by the Department of Ecology.	December 30, 2008
• **Stormwater Treatment Engineering Report** The report shall evaluate adequacy and appropriateness of existing DAF treatment system and its hydrologic capabilities. The report must identify an optimum design storm that maximizes the treatment system capability using Western Washington Hydrologic Model, or similar model approved by the Department of Ecology.	May 30, 2009
• **Stormwater Quality Improvement Report** The report shall evaluate other stormwater issues related to SIM operation and infrastructure. The report shall include an evaluation of shipping dock for cracks and leaks, and roads adjacent to SIM immediately leaving the SIM facility for pollutants that are tracked out by vehicles, and for pollution and contamination caused by SIM operations.	May 30, 2009
• **Mixing Zone Work Plan** The report would propose modeling methodology, sampling and analyses, and associated quality assurance plan.	January 30, 2009
• **Mixing Zone Study** The report shall contain results of mixing zone modeling efforts and any site-specific sampling and analysis required to determine minimum mixing zone and associated dilution factor for this site.	July 30, 2009

D. An Operation and Maintenance Manual (OMM) for the approved treatment unit shall be submitted one (1) month prior to completion of construction and installation, in compliance with WAC 173-240-150.

E. This Order shall not be construed as satisfying other conditions in the existing permit, or other applicable federal, state, or local statutes, ordinances or regulations.

Failure to comply with this Order may result in the issuance of civil penalties or other actions, whether administrative or judicial, to enforce the terms of this Order.

You have a right to appeal this Order. To appeal this you must:

- File your appeal with the Pollution Control Hearings Board within thirty (30) days of the "date of receipt" of this document. Filing means actual receipt by the Board during regular office hours.
- Serve your appeal on the Department of Ecology within thirty (30) days of the "date of receipt" of this document. Service may be accomplished by any of the procedures identified in WAC 371-08-305(10). "Date of receipt" is defined at RCW 43.21B.001(2).

Be sure to do the following:

- Include a copy of this document that you are appealing with your Notice of Appeal.
- Serve and file your appeal in paper form; electronic copies are not accepted.

1. **To file your appeal with the Pollution Control Hearings Board:**

Mail appeal to:		Deliver your appeal in person to:
The Pollution Control Hearings Board PO Box 40903 Olympia WA 98504-0903	OR	The Pollution Control Hearings Board 4224 – 6th Ave SE Rowe Six, Bldg 2 Lacey WA 98503

2. **To serve your appeal on the Department of Ecology:**

Mail appeal to:		Deliver your appeal in person to:
The Department of Ecology Appeals & Application for Relief Coordinator PO Box 47608 Olympia WA 98504-7608	OR	The Department of Ecology Appeals & Application for Relief Coordinator 300 Desmond Dr SE Lacey WA 98503

3. **And send a copy of your appeal to:**

Enforcement Coordinator
Department of Ecology
Northwest Regional Office
3190 160th Ave SE
Bellevue WA 98008-5452

For additional information, visit the Environmental Hearings Office Website: http://www.eho.wa.gov
To find laws and agency rules, visit the Washington State Legislature Website:
http://www1.leg.wa.gov/CodeReviser

Your appeal alone will not stay the effectiveness of this Order. Stay requests must be submitted in accordance with RCW 43.21B.320. These procedures are consistent with Ch. 43.21B RCW.

DATED November 14, 2008 at Bellevue, Washington.

Kevin C. Fitzpatrick
Water Quality Section Manager

ATTACHMENT B

Past Effluent Violations

Seattle Iron & Metals
Effluent Violations

	Date	Parameter	Value	Max	Unit
2007					
	12/1/2007	Copper	102	5.8	UG/L
	12/1/2007	Zinc	1440	95.1	UG/L
	12/1/2007	TPH	17.1	5	Mg/L
	12/1/2007	Turbidity	48	5	NTU
2008					
	1/1/2008	Copper	55	5.8	UG/L
	1/1/2008	Zinc	967	95.1	UG/L
	1/1/2008	TPH	33	5	Mg/L
	1/1/2008	Turbidity	72	5	NTU
	2/1/2008	Copper	25	5.8	UG/L
	2/1/2008	Zinc	725	95.1	UG/L
	2/1/2008	TPH	33	5	UG/L
	2/1/2008	Turbidity	54	5	NTU
	3/1/2008	Copper	34	5.8	UG/L
	3/1/2008	Zinc	544	95.1	UG/L
	3/1/2008	TPH	45	5	Mg/L
	3/1/2008	Turbidity	63	5	NTU
	4/1/2008	TPH	13.2	5	Mg/L
	4/1/2008	Turbidity	6.9	5	NTU
	6/1/2008	Copper	15	5.8	UG/L
	6/1/2008	Zinc	225	95.1	UG/L
	6/1/2008	TPH	11.5	5	MG/L
	6/1/2008	Turbidity	18	5	NTU
	8/1/2008	Copper	10	5.8	UG/L
	8/1/2008	Zinc	123	95.1	UG/L
	8/1/2008	TPH	12.4	5	Mg/L
	8/1/2008	Turbidity	44	5	NTU
	10/1/2008	Copper	23	5.8	UG/L
	10/1/2008	Zinc	510	95.1	UG/L
	10/1/2008	Turbidity	140	5	NTU
	12/1/2008	Copper	13	5.8	UG/L
	12/1/2008	Zinc	210	95.1	UG/L
	12/1/2008	Turbidity	94	5	NTU
2009					
	2/1/2009	Copper	7.7	5.8	UG/L
	2/1/2009	Turbidity	27	5	NTU
	3/1/2009	Zinc	136	95	UG/L
	3/1/2009	PCB	did not test	5	UG/L

3/1/2009	Turbidity	66	5	NTU
5/1/2009	Copper	32	5.8	UG/L
5/1/2009	Zinc	400	95.1	UG/L
5/1/2009	Turbidity	15	5	NTU
8/1/2009	Copper	19	5.8	UG/L
8/1/2009	Zinc	180	95.1	UG/L
8/1/2009	Turbidity	27	5	Mg/L
9/1/2009	Copper	12	5,8	UG/L
9/1/2009	Zinc	140	95.1	UG/L
9/1/2009	Turbidity	32	5	NTU
10/1/2009	Copper	67	5.8	UG/L
10/1/2009	Zinc	1100	95.1	UG/L
10/1/2009	Turbidity	52	5	NTU
11/1/2009	Copper	35	5.8	UG/L
11/1/2009	Zinc	370	95.1	UG/L
11/1/2009	TPH	28	5	Mg/L
11/1/2009	Turbidity	13	5	NTU
12/1/2009	Copper	28	5.8	UG/L
12/1/2009	Zinc	160	95.1	UG/L
12/1/2009	TPH	13	5	Mg/L
12/1/2009	Turbidity	10.7	5	NTU
12/1/2009	pH	12	9	S.U.

2010

1/1/2010	Copper	20	5.8	UG/L
1/1/2010	Zinc	330	95.1	UG/L
1/1/2010	TPH	6.2	5	Mg/L
1/1/2010	Turbidity	19.2	5	Mg/L
2/1/2010	Copper	21	5.8	UG/L
2/1/2010	Zinc	190	95.1	UG/L
2/1/2010	TPH	5.2	5	Mg/L
2/1/2010	Turbidity	34	5	NTU

Total Effluent Violations Since Effective Date of the Permit (12/01/2007)= **66**

ATTACHMENT C

TSCA Notice of Inspection

US ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, DC 20460

EPA

TOXIC SUBSTANCES CONTROL ACT

NOTICE OF INSPECTION

1. INVESTIGATION IDENTIFICATION			3. FACILITY NAME
DATE	INSPECTION NO.	DAILY SEQ. NO.	Seattle Iron & Metals Corp.
05/11/2010			
2. INSPECTOR'S ADDRESS			4. FACILITY ADDRESS
1200 6th Ave Suite 900 M/S OCE 164 Seattle WA 98101			601 S Myrtle St Seattle, WA 98108

For Internal EPA Use. Copies may be provided to recipient as acknowledgment of this notice.

REASON FOR INSPECTION

Under the authority of Section 11 of the Toxic Substances Control Act:

☒ For the purpose of inspecting (including taking samples, photographs, statements, and other inspection activities) an establishment, facility, or other premises in which chemical substances or mixtures, articles containing same are manufactured, processed, stored or held before or after their distribution in commerce (including records, files, papers, processes, controls, and facilities) and any conveyances being used to transport chemical substances, mixtures, or articles containing same in connection with their distribution in commerce (including records, files, papers, processes, controls, and facilities) bearing on whether the requirements of the Act are applicable to the chemical substances, mixtures, or articles within, or associated with, such premise or conveyance have been complied with.

☐ In addition, this inspection extends to (check appropriate blocks):

- ☐ A. Financial data
- ☐ B. Sales data
- ☐ C. Pricing data
- ☐ D. Personnel data
- ☐ E. Research data

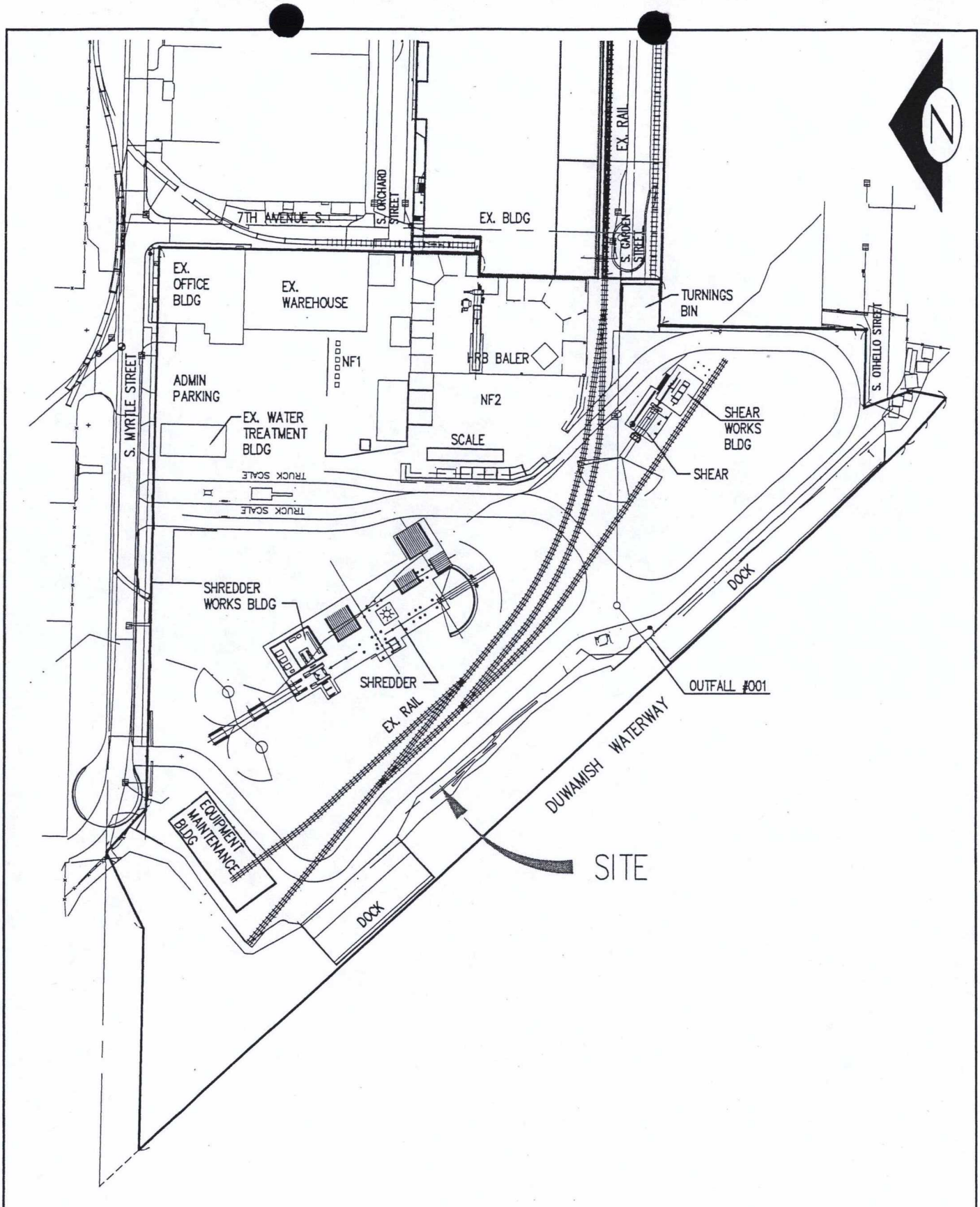
The nature and extent of inspection of such data specified in A through E above is as follows:

INSPECTOR'S SIGNATURE		RECIPIENT'S SIGNATURE	
NAME		NAME	
Jon Klemesrud		Raymond Perez	
TITLE	DATE SIGNED	TITLE	DATE SIGNED
Environmental Scientist	05/11/2010		

☆US GPO:2003-520-530

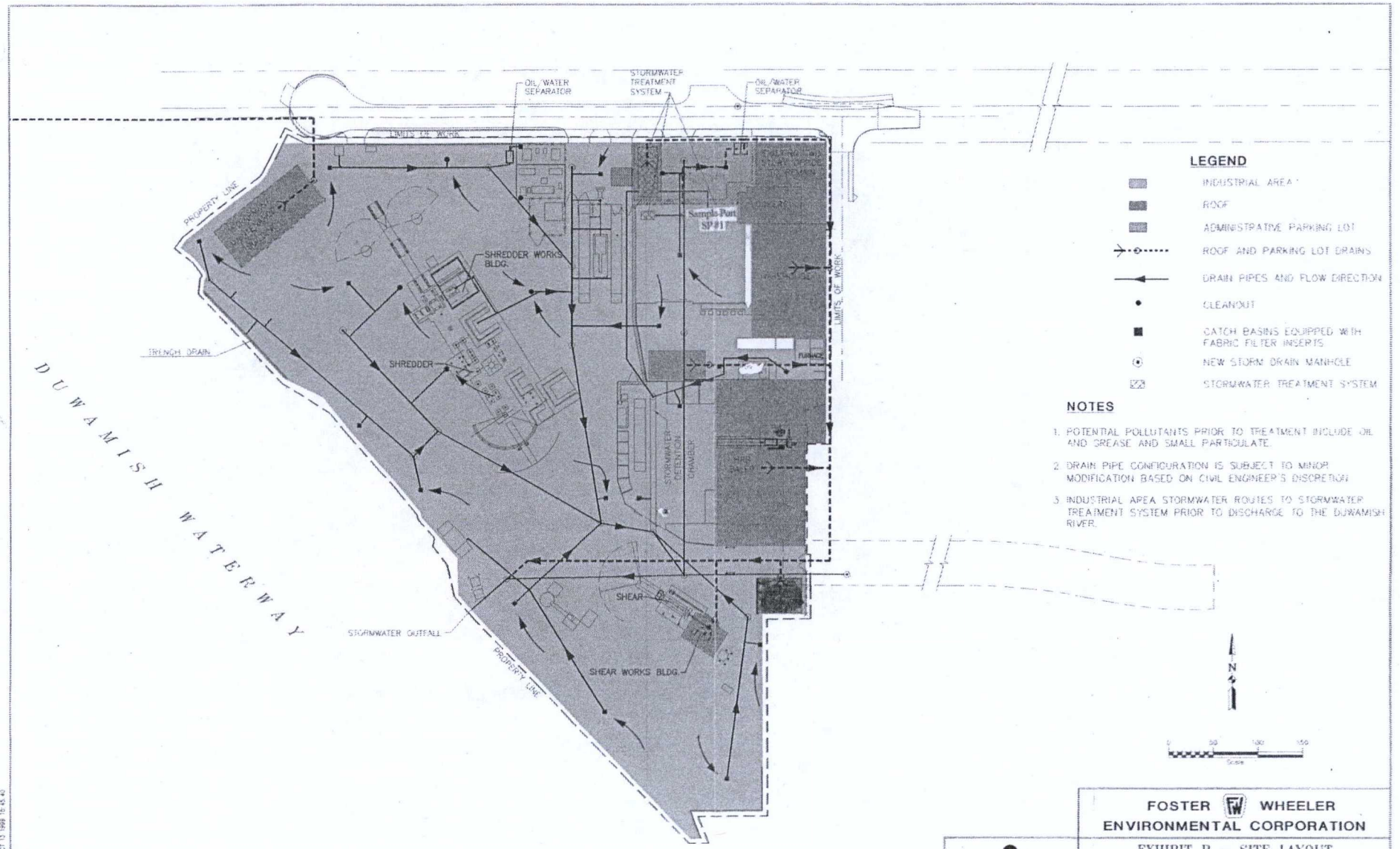
ATTACHMENT D

Facility Map/Stormwater Discharge Plan



kpff Consulting Engineers
1201 Pacific Avenue, Suite 800
Tacoma, Washington 98402
(253) 396–0150 Fax (253) 396–0162

FIGURE 2.2
601 S. MYRTLE STREET
MAP OF FACILITY



FOSTER WHEELER ENVIRONMENTAL CORPORATION

SEATTLE IRON & METALS CORP.

EXHIBIT B – SITE LAYOUT
STORMWATER DISCHARGE PLAN
SEATTLE IRON AND METALS CORP.

C:\PROJECTS\1498003\DWG\EXHIBITB.DWG
PLOT/UPDATE OCT 13 1998 15:45:40

ATTACHMENT E

Flow Diagram of Stormwater Treatment

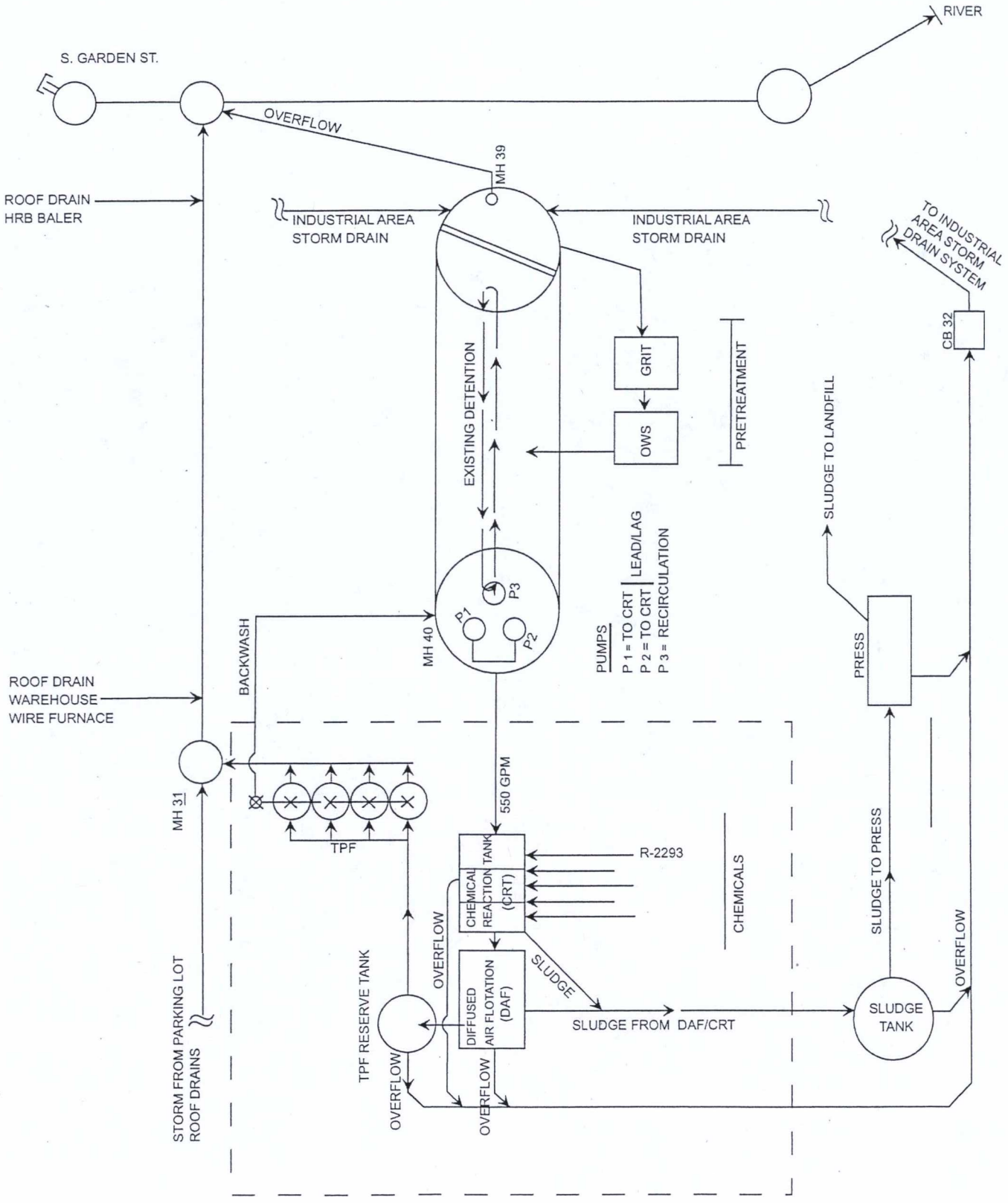


FIG. 3.2 EXISTING FLOW DIAGRAM OF STORMWATER TREATMENT SYSTEM

ATTACHMENT F

XRF Screening Level Analysis

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10 LABORATORY
7411 Beach Dr. East
PortOrchard, Washington 98366

May 28, 2010

MEMORANDUM

TO: Jon Klemesrud, Inspector
Office of Enforcement and Compliance
Inspection and Enforcement Management Unit

FROM: Jed Januch, Senior Investigator
Office of Environmental Assessment
Environmental Services Unit

SUBJECT: Case Narrative for Technical Support – Seattle Iron & Metals Corp.

Project Code: ESD-202A
Account Code: 20102011B10P501E506

Introduction

This memorandum documents screening level analysis by x-ray fluorescence (XRF) spectroscopy performed on samples collected at Seattle Iron & Metals Corporation in Seattle, Washington, on May 11, 2010. The objective of the analysis was to identify the amount of metals, specifically chromium (Cr), copper (Cu), lead (Pb), and zinc (Zn) in the samples. The sampling was conducted by EPA Region 10 field personnel and carried out in accordance with the EPA Region 10 Generic RCRA quality assurance project plan (QAPP) with a RCRA Site-Specific Inspection Plan approved by Donald Matheny, QA Chemist, on May, 2010. The XRF analysis was performed by field personnel at the EPA Region 10 Laboratory using an Innov-X portable XRF spectrometer. It was operated according to the EPA Region 10 standard operating procedure for XRF (soil and sediment) Revision 1, May 18, 2009, and following EPA SW 846, Method 6200 (USEPA, 1998).

Sampling Procedure

A total of four sediment samples were collected for this project. Sample 10194000 was collected from a roof drain on the main office building, sample 10194001 was collected from a rain gutter on the north facing side of the maintenance building, sample 10194002 was collected from a catch basin in the employee parking lot, and sample 10194003 was from a catch basin on the south side of Myrtle Street. The samples were collected with clean stainless steel spoons and composited in clean stainless steel mixing bowls. The samples were placed inside new/clean quality control (QC) class 500 milliliter (ml) glass containers with Teflon®-lined plastic lids. A copy of the quality certification from the manufacturer of the sample containers is included in Attachment 1. The sample containers were labeled, enclosed in zip lock bags, and placed in a clean cooler containing wet ice for transportation under chain of custody to the EPA Region 10 Laboratory in Port Orchard, Washington. The samples were submitted to Karen Norton, EPA Region 10 Laboratory sample custodian, on May 12, 2010. A copy of the chain of custody form is included in Attachment 2.

Microscopic Examination

The samples were examined with a Wild M-5A stereomicroscope to provide a basic physical description of the sample material. In addition to soil and organic matter, I observed various paint fragments and fibrous material, both synthetic and glass. A digital image of material observed in sample 10194002 is included in Figure 1.

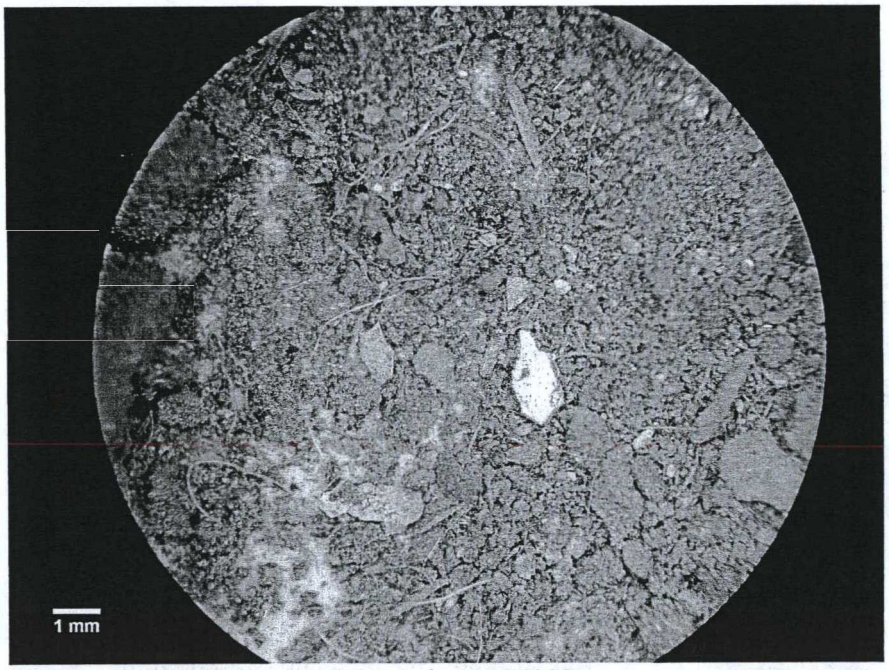


Figure 1 – Paint fragments in sample 10194002.

XRF Analysis

Screening-level analysis for certain metals was conducted at the laboratory on May 14 and May 25, 2010, using an Innov-X portable XRF spectrometer, Model α-4000 SL (serial number 5514). The XRF was calibrated by the manufacturer (calibration certificate number 0111621-1) on March 31, 2010. A copy of the calibration certificate is included in Attachment 3.

The XRF was operated in the soil analysis mode and set for the standard analysis program. The XRF screening was performed on a subsample of the samples submitted to the laboratory. The following QC measurements were performed during this project:

- Instrument resolution check using an Alloy 316 standard.
- Instrument blank sample consisting of quartz (SiO_2).
- Calibration verification was conducted by analyzing two standard reference materials (SRM) 2702 and 2781 issued by the National Institute of Standards and Technology (NIST).
- Precision measurement (seven repeat analyses) was performed on sample 10194002.

Results of Screening-Level Analysis

When interpreting results of screening-level analysis by portable XRF, the end user of the data must consider the limitations of this instrument. The portable XRF generates a great deal of

data relatively quickly; however data may be impacted by the degree of homogeneity of the sample, spectral interference, chemical interference, and sample moisture content.

QC Results

The resolution of the detector was determined to be satisfactory by measurement of the manganese Kα peak (full width/half maximum) at 5.9 electron volts (eV). Analysis of the quartz instrument blank did not reveal element concentrations above the limit of detection for the XRF. Results of screening level analysis of SRM 2702 and 2781 were within 30% difference from the values stated in the certificates of analysis for these reference materials. Precision measurements for analysis of four metals were within 20% relative standard deviation (RSD). Results of the QC analysis are included below:

Seattle Iron & Metal QA/QC Analyses, Project Code: ESD-202A

Standard Reference Materials

	Cr	Cr +/-	Cu	Cu +/-	Pb	Pb +/-	Zn	Zn +/-
srm 2781	155	46	590	16	201	7	1204	20
cert value	202	9	627.4	13.5	202.1	6.5	1273	53
% Difference	-23.3		-6.0		-0.5		-5.4	
srm 2702	449	83	105	12	137	7	436	14
cert value	352	22	117.1	5.6	132.8	1.1	485.3	4.2
% Difference	27.6		-10.3		3.2		-10.2	
srm 2702 (repeat)	371	57	85	8	131	5	428	10
cert value	352	22	117.1	5.6	132.8	1.1	485.3	4.2
% Difference	5.4		-27.4		-1.4		-11.8	
SiO2 blank	<LOD	78	<LOD	17	<LOD	7	<LOD	7

Precision Check - Sample 10194002, run for 120 seconds using the standard analysis setting.

Repetition	ppm Cr	ppm Cu	ppm Pb	ppm Zn
1	1457	1541	1385	5803
2	1402	1537	1372	5755
3	1346	1515	1362	5799
4	1510	1560	1360	5749
5	1540	1526	1327	5584
6	1521	1513	1331	5485
7	1575	1554	1332	5535
Average =	1478.7	1535.1	1352.7	5672.9
Standard Deviation =	81.4	18.2	22.8	133.9
Relative SD (%)=	5.5	1.2	1.7	2.4

XRF Screening Results

Screening-level analyses of the samples tested on May 14, 2010, revealed the presence of metals including Cr, Cu, Pb, and Zn. Screening results are displayed below for the elements of interest in units of parts per million (ppm). A complete file including all QC and results of analysis for the full range of elements that were detected is appended to this narrative report.

Date	Time	Sample No.	Cr	Cr +/-	Cu	Cu +/-	Pb	Pb +/-	Zn	Zn +/-
14-May-10	14:14:03	10194000	**1632**	133	**992**	30	**1299**	26	**5123**	79
14-May-10	14:15:47	10194001	**907**	145	**1232**	38	**1760**	36	**8506**	137
14-May-10	14:17:36	10194002	**1614**	127	**1713**	40	**1361**	26	**5863**	88
14-May-10	14:19:41	10194003	**409**	82	**823**	24	**932**	19	**4817**	69

Figures 2-5 below display annotated XRF spectra collected during the screening level analysis of samples 10194000, 10194001, 10194002, and 10194003.

Figure 2 – XRF spectrum for sample 10194000

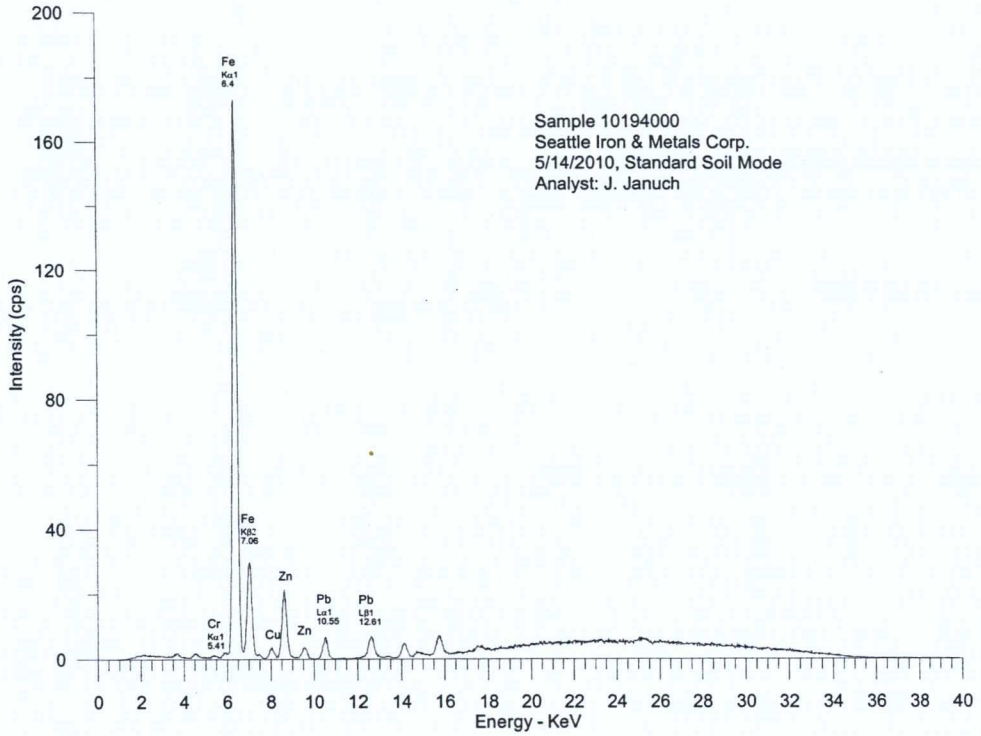


Figure 3 – XRF spectrum for sample 10194001

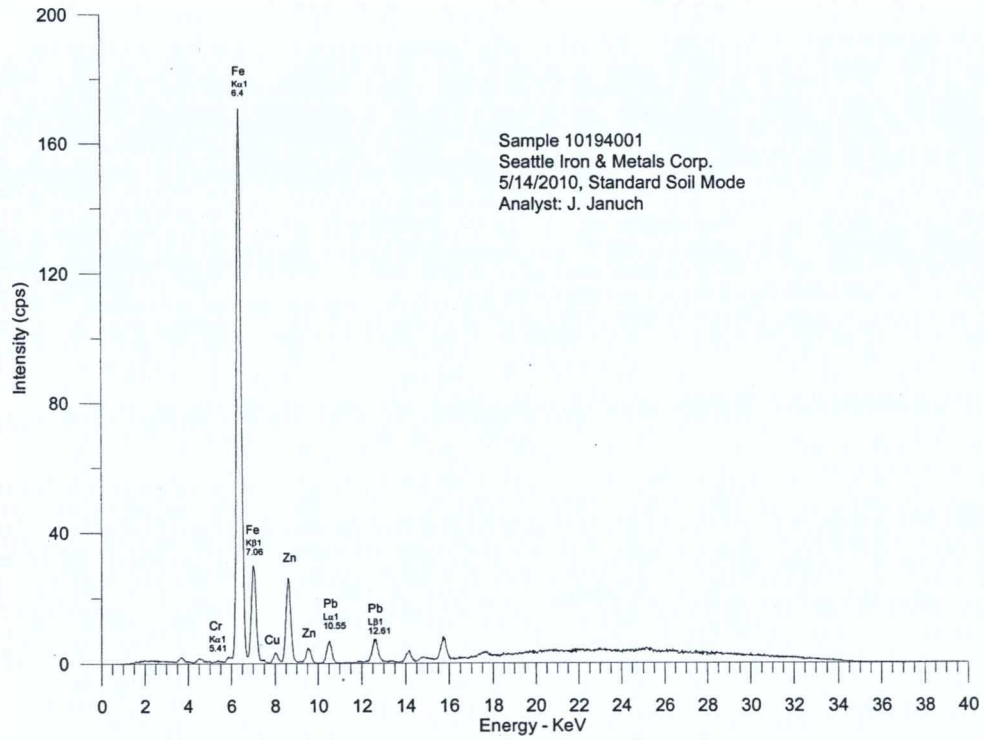


Figure 4 – XRF spectrum for sample 10194002

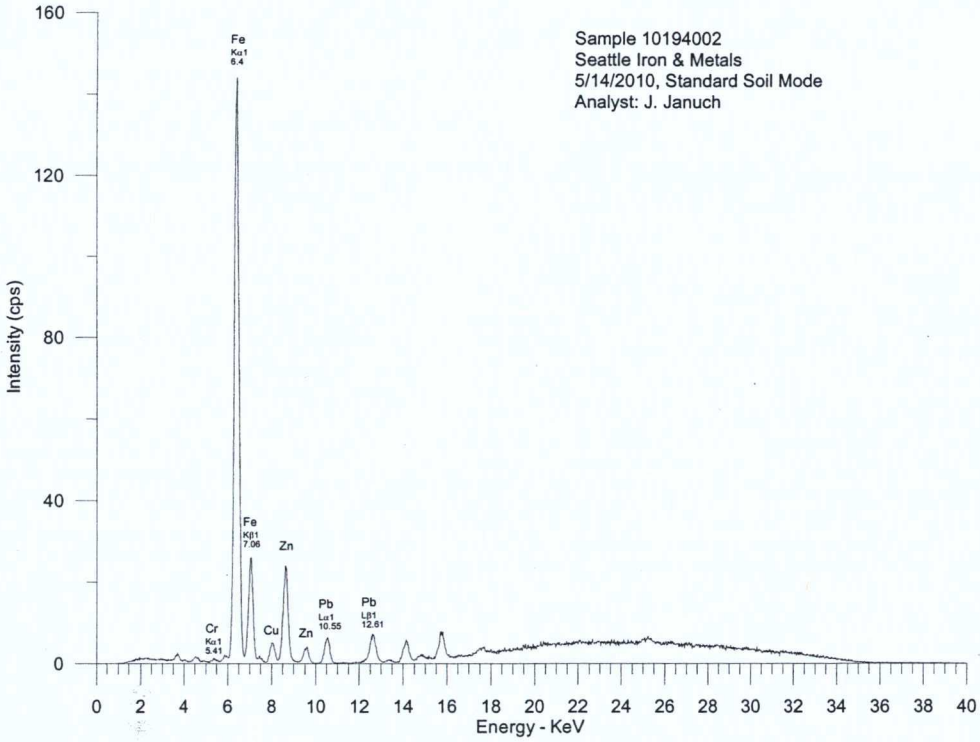
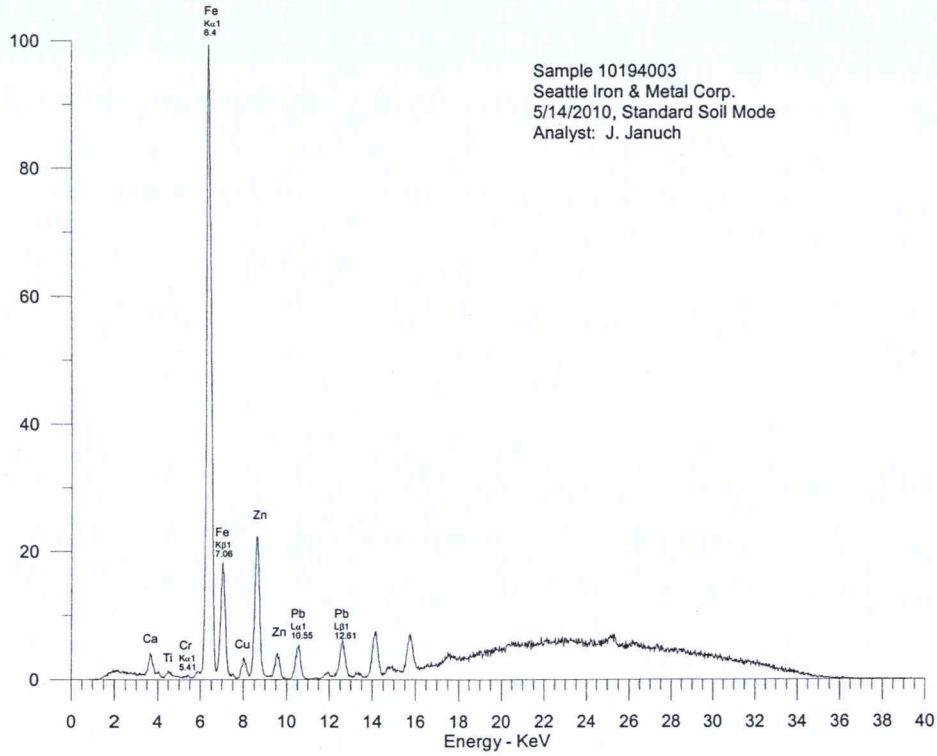


Figure 5 – XRF spectrum for sample 10194003



Pass Fail	Date	Reading	Mode	LiveTime	Match1	Sb	Sb +/-	As	As +/-	Ba	Ba +/-	Br	Br +/-	Cd	Cd +/-	Cr	Cr +/-	Co	Co +/-	Cu
PASS	14-May-10	1	Standardization	30.82	0.019865															
	14-May-10	2	Soil	46.49		<LOD		74	<LOD	53	931	292	NA		<LOD	44	1710	136	1891	171	1044
PASS	14-May-10	3	Standardization	29.11	0.019867															
	14-May-10	4	Soil	45.7		<LOD		49	21	5	<LOD	384	NA		<LOD	31	155	46	400	54	590
	14-May-10	5	Soil	45.66		<LOD		53	<LOD	5	<LOD	242	NA		<LOD	31	<LOD	78	<LOD	19	<LOD
	14-May-10	6	Soil	47.98		<LOD		67	41	6	934	241	NA		<LOD	40	449	83	1160	112	105
	14-May-10	7	Soil	53.35		<LOD		56	<LOD	8	<LOD	236	NA		<LOD	39	<LOD	99	<LOD	30	<LOD
	14-May-10	8	Soil	55.39		<LOD		131	<LOD	21	<LOD	620	NA		<LOD	91	543	139	<LOD	93	<LOD
	14-May-10	9	Soil	45.73		<LOD		52	<LOD	5	<LOD	228	NA		<LOD	31	<LOD	80	<LOD	21	<LOD
	14-May-10	10	Soil	46.54		<LOD		74	82	17	<LOD	854	NA		<LOD	45	1632	133	1929	168	992
	14-May-10	11	Soil	48.01			125	26	107	23	<LOD	1062	NA		<LOD	49	907	145	2176	213	1232
	14-May-10	12	Soil	47.04		<LOD		73	<LOD	52	<LOD	788	NA		<LOD	44	1614	127	1490	153	1713
	14-May-10	13	Soil	47.56			82	22	44	13	743	213	NA		<LOD	40	409	82	866	108	823
PASS	25-May-10	1	Standardization	29.92	0.019871															
	25-May-10	2	Soil	93.17		<LOD		37	<LOD	3	<LOD	165	NA		<LOD	22	<LOD	57	<LOD	14	<LOD
	25-May-10	3	Soil	97.74		<LOD		46	46	4	1119	170	NA		<LOD	28	371	57	951	77	85
	25-May-10	4	Soil	101.57		<LOD		46	<LOD	5	<LOD	232	NA		<LOD	28	<LOD	77	<LOD	29	<LOD
	25-May-10	5	Soil	95.31		<LOD		52	54	12	940	193	NA		<LOD	31	1457	87	1591	107	1541
	25-May-10	6	Soil	95.38		<LOD		51	41	12	983	191	NA		31	10	1402	85	1563	105	1537
	25-May-10	7	Soil	95.25		<LOD		51	77	12	993	192	NA		<LOD	31	1346	85	1721	106	1515
	25-May-10	8	Soil	95.37		<LOD		51	62	12	801	189	NA		<LOD	31	1510	87	1628	106	1560
	25-May-10	9	Soil	95.21			58	17	<LOD	35	557	184	NA		<LOD	30	1540	86	1475	104	1526
	25-May-10	10	Soil	95.18			70	17	<LOD	35	705	187	NA		<LOD	30	1521	86	1753	105	1513
	25-May-10	11	Soil	95.19			53	17	<LOD	35	1037	192	NA		<LOD	30	1575	87	1665	106	1554

Cu	+/-	Fe	Fe +/-	Pb	Pb +/-	Mn	Mn +/-	Hg	Hg +/-	Mo	Mo +/-	Ni	Ni +/-	Pa	Pa +/-	Rb	Rb +/-	Se	Se +/-	Ag	Ag +/-	Sr
31		171978	2189	1415	27	1818	107	<LOD	24	46	4	166	36	NA		22	2	<LOD		8	<LOD	39	228
16		30509	320	201	7	811	44	<LOD	12	46	3	<LOD	44	NA		29	2	21		2	<LOD	28	237
17		<LOD	32	<LOD	7	<LOD	40	<LOD	9	<LOD	7	<LOD	29	NA		<LOD	3	<LOD		3	<LOD	27	<LOD
12		85531	1028	137	7	1701	82	<LOD	16	<LOD	10	<LOD	68	NA		119	3	9		2	<LOD	35	109
22		78	21	24	4	<LOD	52	<LOD	11	65	4	<LOD	33	NA		20	2	<LOD		4	<LOD	38	36
63		686	92	<LOD	33	<LOD	158	<LOD	28	55	9	<LOD	96	NA		<LOD	13	<LOD		11	<LOD	94	32
17		<LOD	33	<LOD	7	<LOD	43	<LOD	9	<LOD	6	<LOD	28	NA		<LOD	2	<LOD		3	<LOD	27	<LOD
30		165416	2108	1299	26	1773	105	<LOD	23	43	4	165	36	NA		27	2	<LOD		8	<LOD	38	219
38		213989	3070	1760	36	2558	137	<LOD	30	48	4	<LOD	124	NA		30	3	<LOD		9	<LOD	43	203
40		139494	1777	1361	26	1702	100	<LOD	24	37	4	262	35	NA		30	2	<LOD		8	<LOD	38	253
24		81872	982	932	19	1008	70	<LOD	19	25	3	<LOD	71	NA		31	2	<LOD		6	<LOD	35	304
12		<LOD	23	<LOD	5	<LOD	32	<LOD	6	<LOD	5	<LOD	21	NA		<LOD	2	<LOD		2	<LOD	19	<LOD
8		84479	713	131	5	1725	57	<LOD	10	11	2	<LOD	47	NA		120	2	8		1	<LOD	25	112
17		734	26	<LOD	7	<LOD	45	<LOD	9	<LOD	6	<LOD	27	NA		<LOD	3	<LOD		3	<LOD	25	256
26		139446	1254	1385	19	1619	69	<LOD	17	36	3	235	24	NA		24	2	<LOD		5	<LOD	27	274
26		137281	1222	1372	18	1701	69	<LOD	17	38	3	228	24	NA		22	1	<LOD		5	<LOD	27	270
26		137637	1230	1362	18	1555	67	<LOD	17	33	3	216	24	NA		21	1	<LOD		5	<LOD	27	273
26		138254	1234	1360	18	1549	68	<LOD	16	38	3	203	24	NA		23	1	<LOD		5	<LOD	27	272
26		136899	1210	1327	18	1499	66	<LOD	17	39	3	225	24	NA		21	1	<LOD		5	<LOD	27	258
26		136801	1208	1331	18	1564	67	<LOD	16	36	3	199	24	NA		24	1	<LOD		5	<LOD	26	261
26		137465	1220	1332	18	1484	67	<LOD	15	37	3	210	24	NA		21	1	<LOD		5	<LOD	27	266

Sr +/-	Sn	Sn +/-	Ti	Ti +/-	Date	Date	Zn	Zn +/-	Zr	Zr +/-	LE	LE +/-	Time	Analyst	Sample ID		Sample Type	Depth
					14-May-10	14-May-10							13:12:59					
5	143	25	7391	799	14-May-10	14-May-10	5244	81	201	5	<LOD	0	13:21:18	Jed Januch	bag prep test		Bagged	
					14-May-10	14-May-10							13:39:06					
4	<LOD	49	3681	363	14-May-10	14-May-10	1204	20	281	4	<LOD	0	13:45:28	Jed Januch	srm 2781		Standard	
3	<LOD	51	<LOD	602	14-May-10	14-May-10	<LOD	7	<LOD	5	<LOD	0	13:51:31	Jed Januch	SiO2 blank		Standard	
3	<LOD	66	11740	719	14-May-10	14-May-10	436	14	300	6	<LOD	0	13:56:14	Jed Januch	srm 2702		Standard	
2	<LOD	57	<LOD	580	14-May-10	14-May-10	72	7	61	3	<LOD	0	14:02:45	Jed Januch	bag		Bagged	
6	<LOD	135	<LOD	1684	14-May-10	14-May-10	43	14	73	8	<LOD	0	14:04:55	Jed Januch	bag		Bagged	
3	<LOD	50	<LOD	574	14-May-10	14-May-10	<LOD	7	<LOD	5	<LOD	0	14:06:47	Jed Januch	SiO2		Standard	
5	124	24	8789	802	14-May-10	14-May-10	5123	79	208	5	<LOD	0	14:14:03	Jed Januch		10194000	Bagged	
6	89	26	9286	979	14-May-10	14-May-10	8506	137	319	7	<LOD	0	14:15:47	Jed Januch		10194001	Bagged	
6	116	24	8152	749	14-May-10	14-May-10	5863	88	226	5	<LOD	0	14:17:36	Jed Januch		10194002	Bagged	
6	72	21	4565	577	14-May-10	14-May-10	4817	69	166	4	<LOD	0	14:19:41	Jed Januch		10194003	Bagged	
					25-May-10	25-May-10							15:50:32					
2	<LOD	36	<LOD	411	25-May-10	25-May-10	<LOD	5	4	1	<LOD	0	15:53:48	Jed Januch	SiO2		Standard	
2	<LOD	45	11633	504	25-May-10	25-May-10	428	10	292	4	<LOD	0	15:57:55	Jed Januch	SRM 2702		Standard	
4	<LOD	45	<LOD	609	25-May-10	25-May-10	8	3	6	2	<LOD	0	16:02:48	Jed Januch	Plastic Zip Lock Blank		Bagged	
4	134	17	6974	528	25-May-10	25-May-10	5803	61	233	4	<LOD	0	16:15:00	Jed Januch	Sample No. 10194002 Rep 1		Bagged	
4	141	17	6851	521	25-May-10	25-May-10	5755	60	225	4	<LOD	0	16:18:07	Jed Januch	Sample No. 10194002 Rep 2		Bagged	
4	110	17	7152	527	25-May-10	25-May-10	5799	61	231	4	<LOD	0	16:21:16	Jed Januch	Sample No. 10194002 Rep 3		Bagged	
4	93	17	7139	522	25-May-10	25-May-10	5749	60	232	4	<LOD	0	16:23:47	Jed Januch	Sample No. 10194002 Rep 4		Bagged	
4	150	17	7829	518	25-May-10	25-May-10	5584	58	209	4	<LOD	0	16:26:48	Jed Januch	Sample No. 10194002 Rep 5		Bagged	
4	120	17	7979	524	25-May-10	25-May-10	5485	58	205	4	<LOD	0	16:30:08	Jed Januch	Sample No. 10194002 Rep 6		Bagged	
4	137	17	7422	529	25-May-10	25-May-10	5535	58	208	4	<LOD	0	16:33:18	Jed Januch	Sample No. 10194002 Rep 7		Bagged	

field5	field6	field7	field8	MN1	Pass/Fail
				229	-0.022334
				231	-0.026369

Seattle Iron & Metal QA/QC Analyses, Project Code: ESD-202A

Standard Reference Materials

	Cr	Cr +/-	Cu	Cu +/-	Pb	Pb +/-	Zn	Zn +/-
srm 2781	155	46	590	16	201	7	1204	20
cert value	202	9	627.4	13.5	202.1	6.5	1273	53
% Difference	-23.3		-6.0		-0.5		-5.4	
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cert value	352	22	117.1	5.6	132.8	1.1	485.3	4.2
% Difference	27.6		-10.3		3.2		-10.2	
srm 2702 (repeat)	371	57	85	8	131	5	428	10
cert value	352	22	117.1	5.6	132.8	1.1	485.3	4.2
% Difference	5.4		-27.4		-1.4		-11.8	
SiO2 blank	<LOD	78	<LOD	17	<LOD	7	<LOD	7

Precision Check - Sample 10194002, run for 120 seconds using the standard analysis setting.

Repetition	ppm Cr	ppm Cu	ppm Pb	ppm Zn
1	1457	1541	1385	5803
2	1402	1537	1372	5755
3	1346	1515	1362	5799
4	1510	1560	1360	5749
5	1540	1526	1327	5584
6	1521	1513	1331	5485
7	1575	1554	1332	5535
Average =	1478.7	1535.1	1352.7	5672.9
Standard Deviation =	81.4	18.2	22.8	133.9
Relative SD (%)=	5.5	1.2	1.7	2.4

ATTACHMENT G

Photograph Documentation

All photographs were taken by Dave Terpening on April 29th, 2010 or May 11th, 2010.

Photo #1: Facing southwest, photograph of the entrance/exit to SIM (photo taken April 29th.)

Photo #2: Facing southeast, photograph of the south dock where barges usually unload material.

Photo #3: Facing east, photograph of on-site stormwater catch basins.

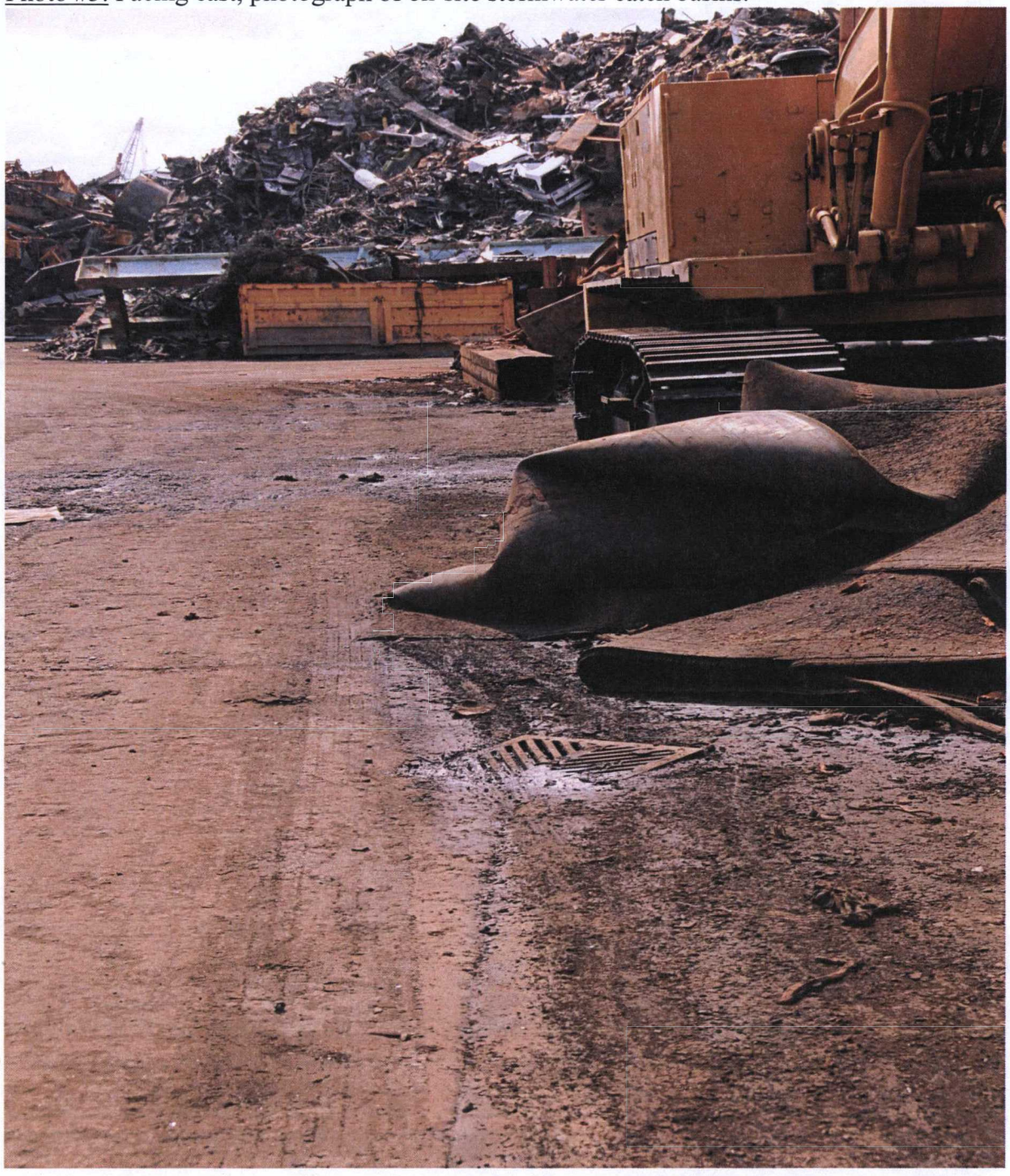

Photo #4: Facing east, photograph of the chemical reaction tanks used in the treatment process.

Photo #5: Facing east, photograph shredding process done at the facility.